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EXAMINER

WALTERS, RYAN J

ART UNIT

PAPER NUMBER

3726

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/509,568	Applicant(s) BINGHAM ET AL.	
	Examiner RYAN J. WALTERS	Art Unit 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 9,14,17,18,27,32,35 and 36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8,10-13,15,16,19-26,28-31,33,34,37 and 38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/29/2004, 6/15/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. **Claims 17-18 and 35-36 are withdrawn** from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 12/7/2009.
2. Applicant's election with traverse of Group I, claims 1-8, 10-13, 15-16, 19-26, 28-31, 33-34 and 37-38, in the reply filed on 12/7/2009 is acknowledged. The traversal is on the ground(s) that the claims of groups I and II are sufficiently related and that their respective classes would be thoroughly cross-referenced and many of the same classes would be searched and further that examiner's practice of only examining method claims is not a serious burden. This is not found persuasive because the inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The special technical features common to both groups are: the steps of forming in a die a plurality of castings each having at least one socket; forming a plurality of metallic rails; and fixing the metallic rails in the sockets of the castings by welding in order to construct the automobile structure. Yoshida (US 5,716,155) explicitly discloses these steps (See Figs. 5-6 and Claims 1-3). Further, the inventions have acquired a separate status in the art in view of their different classification where group I is classified in class 29, subclass 897.2, while group II is classified in class 296, subclass 204 and therefore there would be a serious search and

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examination burden if restriction were not required. Applicant's arguments regarding the examiner only examining method claims are irrelevant since the restriction is made because of the reasons discussed above.

The requirement is still deemed proper and is therefore made FINAL.

3. Also note previous election of Species B, Claims 1-8, 10-13, 15-26, 28-31 and 33-38, in the reply filed on 10/1/2009, whereby claims 9, 14, 27 and 32 were withdrawn. **Thus, claims 1-8, 10-13, 15-16, 19-26, 28-31, 33-34 and 37-38 are being examined in this Office Action.**

Specification

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: **Claims 15-16 and 33-34** recite "an open-section rail", however, the specification describes open sockets in the castings and that the side rails will be fixed into the open sockets (See at least page 6) but never describes "an open-section rail". **Claims 20 and 38** recite "machining after casting some of the identical castings" and "while leaving others of the identical castings unmachined". Page 4 of the specification describes the machining step but does not describe machining some castings and leaving other castings unmachined.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. **Claims 15-16, 19, 33-34 and 37-38 are rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. **Claims 15-16 and 33-34** recite the limitation “an open-section rail”. It is unclear what is meant by this limitation.

8. **Claims 19 and 37** recite the following limitations:

“a plurality of different automobile structures” in line 1

“an automobile” in line 5

“an automobile” in line 7

“a first type of automobile structure” in line 10

“a second type of automobile structure” in line 12.

These limitations should be changed for clarification of the different automobiles.

9. **Claims 19 and 37** recite the limitation “**each** with the same first side rail length” in lines 6 and 8. It is unclear what “each” is referring to, in both instances.

10. **Claims 19 and 37** recite the limitation “the metallic rails” in lines 9 and 11. There is insufficient antecedent basis for this limitation in the claim.

11. **Claims 20 and 38** recite the limitations:

“an automobile” in line 5

“an automobile” in line 7.

These limitations should be changed for clarification of the different automobiles.

12. **Claims 20 and 38** recite the limitations:

“machining after casting some of the identical castings to provide a first plurality of the

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castings” in lines 9-10

“others of the identical castings unmachined to provide a second plurality of the

castings” in lines 10-11

These limitations are unclear. Note that claims 19 and 37 already recite “a [first and second] plurality of castings”. It is unclear what “some of the identical castings” is out of the pluralities of claim 19.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1-2, 4-8, 10-13, 15-16, 19, 28-31, 33-34 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Hasler (US 4,618,163).

15. Re **Claim 1**, Hasler discloses a method of manufacture of an automobile structure comprising the steps of:

forming in a die a plurality of castings 9, 11, 27, 45 each having at least one socket

(Figs. 1-2; Col. 4, lines 1-12);

forming a plurality of metallic rails 3, 5, 15 (Col. 3, lines 55-68); and

fixing the metallic rails in the sockets of the castings in order to construct the automobile structure (Figs. 1-3; Col. 4, lines 49-52; Col. 5, lines 1-30).

16. Re **Claim 2**, Hasler discloses four of the castings are formed which in the finished structure are located one each at the four corners of a generally rectangular

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cabin of the automobile; and two of the metallic rails are side rails which extend longitudinally parallel to each other on opposite sides of the cabin each between a different pair of castings, each side rail being fixed at each end in socket of a casting (Figs. 1-2).

17. Re **Claim 4**, Hasler discloses each of the plurality of metallic rails is formed from an extrusion (Col. 3, lines 55-68).

18. Re **Claim 5**, Hasler discloses fixing the metallic rails in the sockets by bonding with adhesive (Col. 4, lines 21-30).

19. Re **Claim 6**, Hasler discloses the metallic rails are initially secured in place in the sockets by mechanical fasteners and then adhesive is injected in gaps left between the rails and the sockets (Col. 4, lines 21-30, 55-58).

20. Re **Claim 7**, Hasler discloses each socket formed in each casting is open in two perpendicular directions (Figs. 1-2).

21. Re **Claim 8**, Hasler discloses a closing plate is used to complete each socket (Figs. 1-2; Col. 5, line 44).

22. Re **Claim 10**, Hasler discloses each metallic rail is formed from steel by pressing and/or folding (Col. 2, lines 32-38).

23. Re **Claim 11**, Hasler discloses fixing the metallic rails in the sockets by welding (Col. 3, line 26).

24. Re **Claim 12**, Hasler discloses each socket formed in each casting is open in two perpendicular directions (Figs. 1-2).

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25. Re **Claim 13**, Hasler discloses a closing plate is welded to each casting to complete each socket (Figs. 1-2; Col. 5, line 44; Col. 3, line 26).

26. Re **Claim 15**, as best understood, Hasler discloses at least one metallic rail 29 is formed as an open-section rail and in the method a cover plate 37 is fixed to the open-section metallic rail to close the section (Figs. 1-2).

27. Re **Claim 16**, as best understood, Hasler discloses the open-section rail 29 is fixed additionally to a floor panel 39 and the cover plate is fixed to both the floor panel and the metallic rail in order to form a closed-section structure extending along a side of the vehicle (Figs. 1-2).

28. Re **Claim 28**, Hasler discloses each metallic rail is formed from steel by pressing and/or folding (Col. 2, lines 32-38).

29. Re **Claim 29**, Hasler discloses fixing the metallic rails in the sockets by welding (Col. 3, line 26).

30. Re **Claim 30**, Hasler discloses each socket formed in each casting is open in two perpendicular directions (Figs. 1-2).

31. Re **Claim 31**, Hasler discloses a closing plate is welded to each casting to complete each socket (Figs. 1-2; Col. 5, line 44; Col. 3, line 26).

32. Re **Claim 33**, as best understood, Hasler discloses at least one metallic rail 29 is formed as an open-section rail and in the method a cover plate 37 is fixed to the open-section metallic rail to close the section (Figs. 1-2).

33. Re **Claim 34**, as best understood, Hasler discloses the open-section rail 29 is fixed additionally to a floor panel 39 and the cover plate is fixed to both the floor panel

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and the metallic rail in order to form a closed-section structure extending along a side of the vehicle (Figs. 1-2).

34. Re **Claims 19 and 37**, as best understood, Hasler discloses a method of manufacture of a plurality of different automobile structures comprising:

forming in a die a plurality of identical castings each having at least one socket (Figs. 1-2);

forming a first length of metal of a first chosen cross-section;

cutting the first length of metal into a first plurality of side rails 31 for an automobile each with the same first side rail length (Col. 3, line 62; Figs. 1-2);

cutting the first length of metal into a second plurality of side rails 29 for an automobile each with the same second side rail length different to the first side rail length (Col. 3, line 62; Figs. 1-2);

fixing the metallic rails 31 of the first plurality into sockets of a first plurality of the castings 53 to form a first type of automobile structure and

fixing the metallic rails 29 of the second plurality into sockets of a second plurality of castings 27 to form a second type of automobile structure (Figs. 1-2; the "automobile structures" being different portions of the automobile and therefore they are also different types of structures; for plurality of rails see fig. 2 showing that there are identical rails on each side).

Claim Rejections - 35 USC § 103

35. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

36. **Claims 3, 20-26 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasler (US 4,618,163) in view of Aloe (US 5,947,519).**

37. Re **Claims 3 and 21**, Hasler discloses forming at least one of the castings initially with features capable of defining a plurality of different sizes of sockets; selecting a size of cross-section of a metallic rail.

Hasler does not disclose machining the said at least one casting to provide the casting with a socket of a size appropriate for the selected metallic rail.

However, **Aloe** teaches a similar method of manufacturing an automobile structure including forming rails and castings and teaches machining the said at least one casting to provide the casting with a socket of a size appropriate for a selected metallic rail (Col. 7, lines 19-47; Figs. 1, 4-5). It would be obvious to one of ordinary skill in the art to machine the castings after selecting a rail size, as taught by Aloe, for the purpose of precisely determining the attachment locations for the various components (Col. 7, line 27) and to achieve the desired geometric dimensional tolerance (Col. 7, line 32) and to ensure proper positioning of components (Col. 7, line 47).

38. Re **Claim 22**, Hasler discloses each of the plurality of metallic rails is formed from an extrusion (Col. 3, lines 55-68).

39. Re **Claim 23**, Hasler discloses fixing the metallic rails in the sockets by bonding with adhesive (Col. 4, lines 21-30).

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40. Re **Claim 24**, Hasler discloses the metallic rails are initially secured in place in the sockets by mechanical fasteners and then adhesive is injected in gaps left between the rails and the sockets (Col. 4, lines 21-30, 55-58).

41. Re **Claims 20 and 38**, as best understood, Hasler discloses the castings are each formed with features defining a first size of socket and with features capable of defining a second different size of socket (Figs. 1-2), and the method additionally comprises:

forming a second length of metal of a second chosen cross-section (Col. 3, line 62; Figs. 1-2);

cutting the second length of metal into a third plurality of side rails 5 for an automobile each with the same third side rail length (Col. 3, line 62; Figs. 1-2);

cutting the second length of metal into a fourth plurality of side rails 13 for an automobile each with the same fourth side rail length different to the third side rail length (Col. 3, line 62; Figs. 1-2, note that in fig. 2 rail is incorrectly labeled '3' but should be labeled '13' as in fig. 1);

leaving some castings unmachined to provide a second plurality of castings with sockets of the first size; and

selecting between the plurality of castings and the plurality of side rails and

fixing side rails into the sockets of the castings where the sizes of the sockets of the castings match the cross-sections of the side rails in order to form a plurality of different automobile structures from a common set of initial castings and metallic railings (Figs.

1-2).

Hasler does not disclose machining after casting some of the identical castings to provide a first plurality of castings with sockets of a second size.

However, **Aloe** teaches a similar method of manufacturing an automobile structure including forming rails and castings and teaches machining after casting some of the identical castings to provide a first plurality of castings with sockets of a second size appropriate for a selected metallic rail (Col. 7, lines 19-47; Figs. 1, 4-5). It would be obvious to one of ordinary skill in the art to machine the castings after selecting a rail size, as taught by Aloe, for the purpose of precisely determining the attachment locations for the various components (Col. 7, line 27) and to achieve the desired geometric dimensional tolerance (Col. 7, line 32) and to ensure proper positioning of components (Col. 7, line 47).

42. Re **Claim 25**, Hasler discloses each socket formed in each casting is open in two perpendicular directions (Figs. 1-2).

43. Re **Claim 26**, Hasler discloses a closing plate is used to complete each socket (Figs. 1-2; Col. 5, line 44; Col. 3, line 26).

Double Patenting

44. **Applicant is advised that should claims 19-20 be found allowable, claims 37-38 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof.** When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN J. WALTERS whose telephone number is (571)270-5429. The examiner can normally be reached on Monday-Friday, 9am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. J. W./
Examiner, Art Unit 3726

/DAVID P. BRYANT/
Supervisory Patent Examiner, Art Unit 3726